

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/040, 655A
Source: IFW16
Date Processed by STIC: 11-17-04

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 11/17/2004

PATENT APPLICATION: US/10/040,655A

TIME: 12:29:19

Input Set : A:\ORT1566NP.Subst.Seq.List.txt

Output Set: N:\CRF4\11172004\J040655A.raw

```

3 <110> APPLICANT: Andrade-Gordon, Patricia
4      Darrow, Andrew
5      Qi, Jensen
7 <120> TITLE OF INVENTION: CLEANING COMPOSITIONS CONTAINING HUMAN SERINE PROTEASE T
9 <130> FILE REFERENCE: ORT-1566
11 <140> CURRENT APPLICATION NUMBER: US 10/040,655A
12 <141> CURRENT FILING DATE: 2002-01-07
14 <150> PRIOR APPLICATION NUMBER: US 09/386,653
15 <151> PRIOR FILING DATE: 1999-08-31
17 <160> NUMBER OF SEQ ID NOS: 11
19 <170> SOFTWARE: PatentIn version 3.3
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 1110
23 <212> TYPE: DNA
24 <213> ORGANISM: Human
26 <400> SEQUENCE: 1
27 gaccacggcc ctgcgccccca gccaggcctg aggacatgag gcggccggcg gcggtgccgc      60
29 tcctgctgct gctgtgtttt gggctctcaga gggccaaggc agcaacagcc tgtggtcgcc      120
31 ccaggatgct gaaccgaatg gtgggcgggc aggacacgca ggagggcgag tggccctggc      180
33 aagtcagcat ccagcgcaac ggaagccact tctgcggggg cagcctcatc gcggagcagt      240
35 gggctcctgac ggctgcgcac tgcttccgca acacctctga gacgtccctg taccaggtcc      300
37 tgctgggggc aaggcagcta gtgcagccgg gaccacacgc tatgtatgcc cgggtgaggc      360
39 aggtggagag caaccccctg taccagggca cggcctccag cgctgacgtg gccctggtgg      420
41 agctggaggg accagtggcc ttcaccaatt acatcctccc cgtgtgctg cctgacctct      480
43 cggtgatctt tgagacgggc atgaactgct gggctactgg ctggggcagc cccagtgagg      540
45 aagacctcct gcccgaaacc cggatcctgc agaaactcgc tgtgcccata atcgacacac      600
47 ccaagtgcaa cctgctctac agcaaagaca ccgagtttggt ctaccaaccc aaaaccatca      660
49 agaatgacat gctgtgcgcc ggcttcgagg agggcaagaa ggatgcctgc aagggcgact      720
51 cgggcggccc cctggtgtgc ctgctgggtc agtgcgtggct gcaggcgggg gtgatcagct      780
53 ggggtgaggg ctgtgcccgc cagaaccgcc caggtgtcta catcctgtgc accgccacc      840
55 acaactggat ccacggatc atcccaaac tgcagttcca gccagcgagg ttgggcggcc      900
57 agaagtgaga ccccgggg caggagcccc ttgagcagag ctctgcaccc agcctgcccg      960
59 cccacaccat cctgctggtc ctcccagcgc tgctgttgca cctgtgagcc ccaccagact     1020
61 catttgtaaa tagcgctcct tctccctc tcaaataccc ttattttatt tatgtttctc     1080
63 ccaataaaaa cccagcctgt gtgccagctg                                     1110
66 <210> SEQ ID NO: 2
67 <211> LENGTH: 20
68 <212> TYPE: DNA
69 <213> ORGANISM: Artificial
71 <220> FEATURE:
72 <223> OTHER INFORMATION: ProtT PC RTP-U primer
74 <400> SEQUENCE: 2
75 gccaggcctg aggacatgag

```

20

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/040,655A

DATE: 11/17/2004

TIME: 12:29:19

Input Set : A:\ORT1566NP.Subst.Seq.List.txt

Output Set: N:\CRF4\11172004\J040655A.raw

```

78 <210> SEQ ID NO: 3
79 <211> LENGTH: 20
80 <212> TYPE: DNA
81 <213> ORGANISM: Artificial
83 <220> FEATURE:
84 <223> OTHER INFORMATION: ProtT PC RTP-L
86 <400> SEQUENCE: 3
87 tgcgctggat gctgacttgc
90 <210> SEQ ID NO: 4
91 <211> LENGTH: 40
92 <212> TYPE: DNA
93 <213> ORGANISM: Artificial
95 <220> FEATURE:
96 <223> OTHER INFORMATION: ProtT PC RTP-PP
98 <400> SEQUENCE: 4
99 ccaggatgct gaaccgaatg gtgggcgggc aggacacgca
102 <210> SEQ ID NO: 5
103 <211> LENGTH: 30
104 <212> TYPE: DNA
105 <213> ORGANISM: Artificial
107 <220> FEATURE:
108 <223> OTHER INFORMATION: Prot T Xba-U
110 <400> SEQUENCE: 5
111 aggatctaga ggaggcgag tggccctggc
114 <210> SEQ ID NO: 6
115 <211> LENGTH: 30
116 <212> TYPE: DNA
117 <213> ORGANISM: Artificial
119 <220> FEATURE:
120 <223> OTHER INFORMATION: Prot T Xba-L
122 <400> SEQUENCE: 6
123 ggggtctaga cttctggccg cccaacctcg
126 <210> SEQ ID NO: 7
127 <211> LENGTH: 290
128 <212> TYPE: PRT
129 <213> ORGANISM: Human
131 <400> SEQUENCE: 7
133 Met Arg Arg Pro Ala Ala Val Pro Leu Leu Leu Leu Cys Phe Gly
134 1 5 10 15
137 Ser Gln Arg Ala Lys Ala Ala Thr Ala Cys Gly Arg Pro Arg Met Leu
138 20 25 30
141 Asn Arg Met Val Gly Gly Gln Asp Thr Gln Glu Gly Glu Trp Pro Trp
142 35 40 45
145 Gln Val Ser Ile Gln Arg Asn Gly Ser His Phe Cys Gly Gly Ser Leu
146 50 55 60
149 Ile Ala Glu Gln Trp Val Leu Thr Ala Ala His Cys Phe Arg Asn Thr
150 65 70 75 80
153 Ser Glu Thr Ser Leu Tyr Gln Val Leu Leu Gly Ala Arg Gln Leu Val
154 85 90 95

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/040,655A

DATE: 11/17/2004

TIME: 12:29:19

Input Set : A:\ORT1566NP.Subst.Seq.List.txt

Output Set: N:\CRF4\11172004\J040655A.raw

157 Gln Pro Gly Pro His Ala Met Tyr Ala Arg Val Arg Gln Val Glu Ser
 158 100 105 110
 161 Asn Pro Leu Tyr Gln Gly Thr Ala Ser Ser Ala Asp Val Ala Leu Val
 162 115 120 125
 165 Glu Leu Glu Ala Pro Val Pro Phe Thr Asn Tyr Ile Leu Pro Val Cys
 166 130 135 140
 169 Leu Pro Asp Pro Ser Val Ile Phe Glu Thr Gly Met Asn Cys Trp Val
 170 145 150 155 160
 173 Thr Gly Trp Gly Ser Pro Ser Glu Glu Asp Leu Leu Pro Glu Pro Arg
 174 165 170 175
 177 Ile Leu Gln Lys Leu Ala Val Pro Ile Ile Asp Thr Pro Lys Cys Asn
 178 180 185 190
 181 Leu Leu Tyr Ser Lys Asp Thr Glu Phe Gly Tyr Gln Pro Lys Thr Ile
 182 195 200 205
 185 Lys Asn Asp Met Leu Cys Ala Gly Phe Glu Glu Gly Lys Lys Asp Ala
 186 210 215 220
 189 Cys Lys Gly Asp Ser Gly Gly Pro Leu Val Cys Leu Val Gly Gln Ser
 190 225 230 235 240
 193 Trp Leu Gln Ala Gly Val Ile Ser Trp Gly Glu Gly Cys Ala Arg Gln
 194 245 250 255
 197 Asn Arg Pro Gly Val Tyr Ile Arg Val Thr Ala His His Asn Trp Ile
 198 260 265 270
 201 His Arg Ile Ile Pro Lys Leu Gln Phe Gln Pro Ala Arg Leu Gly Gly
 202 275 280 285
 205 Gln Lys
 206 290

209 <210> SEQ ID NO: 8

210 <211> LENGTH: 1130

211 <212> TYPE: DNA

212 <213> ORGANISM: Artificial

214 <220> FEATURE:

215 <223> OTHER INFORMATION: PFEK-PROTT-HIS fusion protein

217 <400> SEQUENCE: 8

218 gaattcacca ccatggacag caaagggttcg tgcagaaat cccgcctgct cctgctgctg 60
 220 gtggtgtcaa atctactctt gtgccagggt gtggtctccg actacaagga cgacgacgac 120
 222 gtggacgcgg ccgctcttgc tgcccccttt gatgatgatg acaagatcgt tgggggctat 180
 224 gctctagagg agggcgagtg gccctggcaa gtcagcatcc agcgcacg aagccacttc 240
 226 tgcgggggca gcctcatcgc ggagcagtgg gtcctgacgg ctgcgcactg cttccgcaac 300
 228 acctctgaga cgtccctgta ccaggtcctg ctgggggcaa ggcagctagt gcagccggga 360
 230 ccacacgcta tgtatgcccg ggtgaggcag gtggagagca accccctgta ccagggcacg 420
 232 gcctccagcg ctgacgtggc cctggtggag ctggaggcac cagtgccctt caccaattac 480
 234 atctctcccg tgtgctgccc tgaccctcgc gtgatctttg agacgggcat gaactgctgg 540
 236 gtactgtgct ggggcagccc cagtgaggaa gacctcctgc ccgaaccgcg gatcctgcag 600
 238 aaactcgctg tgcccatcat cgacacaccc aagtgcaccc tgctctacag caaagacacc 660
 240 gagtttggtt accaaccctaa aaccatcaag aatgacatgc tgtgcgcggg cttcgaggag 720
 242 ggcaagaagg atgcttgcaa gggcgactcg ggcgggcccc tgggtgtgct cgtgggtcag 780
 244 tcgtggctgc aggcgggggt gatcagctgg ggtgagggtt gtgcccgcga gaaccgcca 840
 246 ggtgtctaca tccgtgtcac cgcccaccac aactggatcc atcggtatc ccccaactg 900
 248 cagttccagc cagcgagggt gggcgggccag aagtctagac atcaccatca ccatcactag 960

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/040,655A

DATE: 11/17/2004

TIME: 12:29:19

Input Set : A:\ORT1566NP.Subst.Seq.List.txt

Output Set: N:\CRF4\11172004\J040655A.raw

```

250 cggccgcttc ccttttagtga gggttaatgc ttcgagcaga catgataaga tacattgatg 1020
252 agtttggaca aaccacaact agaatgcagt gaaaaaatg ctttatttgt gaaatttgtg 1080
254 atgctattgc tttatttga accattataa gctgcaataa acaagttgac 1130
257 <210> SEQ ID NO: 9
258 <211> LENGTH: 315
259 <212> TYPE: PRT
260 <213> ORGANISM: Artificial
262 <220> FEATURE:
263 <223> OTHER INFORMATION: PFEK-PROTT-HIS fusion protein amino acid sequence
265 <400> SEQUENCE: 9
267 Met Asp Ser Lys Gly Ser Ser Gln Lys Ser Arg Leu Leu Leu Leu Leu
268 1 5 10 15
271 Val Val Ser Asn Leu Leu Leu Cys Gln Gly Val Val Ser Asp Tyr Lys
272 20 25 30
275 Asp Asp Asp Asp Val Asp Ala Ala Ala Leu Ala Ala Pro Phe Asp Asp
276 35 40 45
279 Asp Asp Lys Ile Val Gly Gly Tyr Ala Leu Glu Glu Gly Glu Trp Pro
280 50 55 60
283 Trp Gln Val Ser Ile Gln Arg Asn Gly Ser His Phe Cys Gly Gly Ser
284 65 70 75 80
287 Leu Ile Ala Glu Gln Trp Val Leu Thr Ala Ala His Cys Phe Arg Asn
288 85 90 95
291 Thr Ser Glu Thr Ser Leu Tyr Gln Val Leu Leu Gly Ala Arg Gln Leu
292 100 105 110
295 Val Gln Pro Gly Pro His Ala Met Tyr Ala Arg Val Arg Gln Val Glu
296 115 120 125
299 Ser Asn Pro Leu Tyr Gln Gly Thr Ala Ser Ser Ala Asp Val Ala Leu
300 130 135 140
303 Val Glu Leu Glu Ala Pro Val Pro Phe Thr Asn Tyr Ile Leu Pro Val
304 145 150 155 160
307 Cys Leu Pro Asp Pro Ser Val Ile Phe Glu Thr Gly Met Asn Cys Trp
308 165 170 175
311 Val Thr Gly Trp Gly Ser Pro Ser Glu Glu Asp Leu Leu Pro Glu Pro
312 180 185 190
315 Arg Ile Leu Gln Lys Leu Ala Val Pro Ile Ile Asp Thr Pro Lys Cys
316 195 200 205
319 Asn Leu Leu Tyr Ser Lys Asp Thr Glu Phe Gly Tyr Gln Pro Lys Thr
320 210 215 220
323 Ile Lys Asn Asp Met Leu Cys Ala Gly Phe Glu Glu Gly Lys Lys Asp
324 225 230 235 240
327 Ala Cys Lys Gly Asp Ser Gly Gly Pro Leu Val Cys Leu Val Gly Gln
328 245 250 255
331 Ser Trp Leu Gln Ala Gly Val Ile Ser Trp Gly Glu Gly Cys Ala Arg
332 260 265 270
335 Gln Asn Arg Pro Gly Val Tyr Ile Arg Val Thr Ala His His Asn Trp
336 275 280 285
339 Ile His Arg Ile Ile Pro Lys Leu Gln Phe Gln Pro Ala Arg Leu Gly
340 290 295 300
343 Gly Gln Lys Ser Arg His His His His His His

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/040,655A

DATE: 11/17/2004

TIME: 12:29:19

Input Set : A:\ORT1566NP.Subst.Seq.List.txt

Output Set: N:\CRF4\11172004\J040655A.raw

```
344 305          310          315
347 <210> SEQ ID NO: 10
348 <211> LENGTH: 4
349 <212> TYPE: PRT
350 <213> ORGANISM: Artificial
352 <220> FEATURE:
353 <223> OTHER INFORMATION: Chromogenic substrate
356 <220> FEATURE:
357 <221> NAME/KEY: MISC_FEATURE
358 <222> LOCATION: (1)..(1)
359 <223> OTHER INFORMATION: N-Succinyl-alanine
361 <220> FEATURE:
362 <221> NAME/KEY: MISC_FEATURE
363 <222> LOCATION: (4)..(4)
364 <223> OTHER INFORMATION: Phe-p-nitroanilide
366 <400> SEQUENCE: 10
W--> 368 Xaa Ala Pro Xaa
369 1
372 <210> SEQ ID NO: 11
373 <211> LENGTH: 4
374 <212> TYPE: PRT
375 <213> ORGANISM: Artificial
377 <220> FEATURE:
378 <223> OTHER INFORMATION: Chromogenic substrate 6
381 <220> FEATURE:
382 <221> NAME/KEY: MISC_FEATURE
383 <222> LOCATION: (1)..(1)
384 <223> OTHER INFORMATION: N-(Methoxysuccinyl)-Ala
386 <220> FEATURE:
387 <221> NAME/KEY: MISC_FEATURE
388 <222> LOCATION: (4)..(4)
389 <223> OTHER INFORMATION: Phe-p-nitroanilide
391 <400> SEQUENCE: 11
W--> 393 Xaa Ala Ala Xaa
394 1
```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/040,655A

DATE: 11/17/2004
TIME: 12:29:21

Input Set : A:\ORT1566NP.Subst.Seq.List.txt
Output Set: N:\CRF4\11172004\J040655A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:10; Xaa Pos. 1,4
Seq#:11; Xaa Pos. 1,4

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:2,3,4,5,6,8,9,10,11

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/040,655A

DATE: 11/17/2004

TIME: 12:29:21

Input Set : A:\ORT1566NP.Subst.Seq.List.txt

Output Set: N:\CRF4\11172004\J040655A.raw

L:368 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0

L:393 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0